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## What is claimed:

- 1. An oral care composition comprising
  - (a) an orally acceptable carrier, and
- 5 (b) an ascorbyl-2-phosphate compound having the following structure, or a sodium or potassium salt thereof,

where n is between 1 and 10.

- 2. The composition of claim 1 wherein n is 2.
- 3. The composition of claim 1 wherein n is 3.
- 15 4. The composition of claim 1 wherein n is between 1 and 5.
  - 5. The composition of claim 1 further including a source of calcium ions.
  - 6. The composition of claim 1 mixed with saliva including a source of calcium ions.
  - 7. The composition of claim 1 wherein the ascorbyl phosphate is ascorbyl-2-monophosphate, ascorbyl-2-diphosphate, ascorbyl-2-triphosphate, ascorbyl-2-polyphosphate, or combinations thereof.

- 8. The composition of claim 1 which optionally includes one or more of an anticaries agent, a tartar control agent, an antimicrobial agent, and a desensitizing agent.
- 9. The composition of claim 1 further including an ingredient promoting the adherence of the compound of formula I to the tooth or gums.
  - 10. The composition of claim 9 wherein the ingredient is a polymer.